

REMARKS

Claims 1-36 are now pending.

The Examiner is thanked for her kind allowance of claims 21-26 and her kind finding of allowable subject matter in claims 27-36.

Claims 1, 15, 27 and 32 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. Claims 21-26 remain unchanged. The text of claims 2-14, 16-20, 28-31, and 33-36 is also unchanged, but their meaning is changed because they depend from the amended claims.

No "new matter" has been added by the amendment.

The 35 U.S.C. § 103 Rejection

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Camporese et al. (U.S. Pat. No. 6,205,571) and Graef (U.S. Pat. No. 6,305,001). This rejection is respectfully traversed.

According to M.P.E.P. § 2143,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

Claim 1 defines a Clock Data Model (CDM) for use with a method including, among others, simulating each of the plurality of local clock nets to generate a load for each of the plurality of local clock nets on the global clock net, and simulating the global

clock net based at least on the simulated load of each of the plurality of local clock nets.

As recited in claim 1, as amended, the plurality of the simulations are stored in the CDM, and especially, clock arrival time and slope for each point where the local clock net is connected to the global clock net is stored in the CDM. Claim 15, as amended, also includes the same distinctive features.

Camporese discloses a grid tree clock distribution system which includes a first level tree wiring network **201**, a second level tree wires **203**, and an X-Y grid **204** as shown in FIG. 6 thereof. Camporese also teaches calculating all capacitance loads at grid intersection points of the X-Y grid-tree (column 7, lines 13-27), and lumped capacitances placed at the grid intersection points (column 11, lines 10-14). However, since Camporese focuses on approximation of various clock loads and thus all effects of the neighboring sectors are represented by the clustered grid loads (see ABSTRACT), Camporese fails to teach considering clock arrival time and slope or suggest storing such data as simulation at any point. Actually, Camporese does not mention “clock slope” at all. Therefore, Camporese neither teaches nor suggests storing clock arrival time and slope for each point where the local clock net is connected to the global clock, as recited in claims 1 and 15 as amended.

Graef teaches planning the clock distribution network, but neither teaches nor suggests storing clock arrival time and slope at points where a local clock net is connected to the global clock net, as claimed.

Accordingly, the claimed invention would not have been obvious from Camporese and Graef, and it is respectfully requested that the rejection of claims based on Camporese and Graef be withdrawn. In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Dependent Claims

Claims 2-14 and 16-20 depend from claim 1 and claim 15, respectively, and thus include the limitations of claim 1 and claim 15. The argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable at least for the same reason.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Request for Allowance

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Allowable Subject Matter

The Examiner is thanked for her kind allowance of claims 21-26 and for her kind finding of allowable subject matter in claims 27-36. Applicants acknowledge the Examiner's statement of reasons for allowance as set forth in the Office Action. However, Applicants point out that the reasons for allowability of the above referenced claims are not limited to the reasons for allowance as set forth in the Office Action, and that additional reasons for allowability may exist, each of which may be independently sufficient to establish the patentability of one or more pending claims.

Applicants respectfully reserve the right to introduce, articulate, or otherwise comment on any such additional reasons for allowance as may be appropriate in any future proceedings concerning the claimed invention.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-1698.

Respectfully submitted,
THELEN REID & PRIEST, LLP

Dated: July 8, 2003



Masako Ando

Limited Recognition under 37 CFR §10.9(b)

Thelen Reid & Priest LLP
P.O. Box 640640
San Jose, CA 95164-0640
(408) 292-5800